

CLAIMS

What is claimed is:

1. An electronic device having a power switching part generating an on/off handling signal according to an external handling of the power switching part, and a power supply part supplying power to a system of the electronic device, the electronic device comprising:

- a microcomputer storing a microcomputer firmware updateable by an updating system and controlling the power supply part based on the on/off handling signal of the power switching part; and

- a signal cut-off part cutting off the on/off handling signal of the power switching part from being transmitted to the microcomputer during the updating of the microcomputer firmware by the updating system.

2. The electronic device according to claim 1, wherein the microcomputer generates a control signal when an update by the updating system is started and ended, and the signal cut-off part cuts off the on/off handling signal of the power switching part and releases the cut-off thereof based on the control signal.

3. The electronic device according to claim 1, wherein the microcomputer generates a cut-off control signal when an update by the updating system is started and a release control signal when the update by the updating system is ended, and the signal cut-off part cuts off the on/off handling signal of the power switching part and releases the cut-off thereof based on the cut-off control signal and the release control signal.

4. The electronic device according to claim 2, wherein the signal cut-off part comprises a tri-state buffer gate.

5. The electronic device according to claim 3, wherein the signal cut-off part comprises a tri-state buffer gate.

6. The electronic device according to claim 1, wherein the signal cut-off part is provided between the power switching part and the microcomputer.

7. A firmware updating method of an electronic device having a power switching part generating an on/off handling signal according to an external handling of the power switching part, a power supply part supplying power to a system of the electronic device, and a microcomputer storing a microcomputer firmware updateable by an updating system and controlling the power supply part based on the on/off handling signal of the power switching part, the method comprising:

- activating a control signal when an update by the updating system is started;
- cutting off the on/off handling signal of the power switching part based on the activated control signal;
- inactivating the activated control signal when the update by the updating system is ended; and
- releasing the cut-off of the on/off handling signal of the power switching part based on the inactivated control signal.

8. The firmware updating method of an electronic device according to claim 7, wherein the control signal is activated in the microcomputer by the updating system.

9. A firmware updating method of an electronic device having a power switching part generating an on/off handling signal according to an external handling of the power switching part, a power supply part supplying power to a system of the electronic device, and a microcomputer storing a microcomputer firmware updateable by an updating system and controlling the power supply part based on the on/off handling signal of the power switching part, the method comprising:

- generating a cut-off control signal when an update by the updating system is started;
- cutting off the on/off handling signal of the power switching part based on the cut-off control signal;
- generating a release control signal when the update by the updating system is ended;
- and
- releasing the cut-off of the on/off handling signal of the power switching part based on the release control signal.

10. The firmware updating method of an electronic device according to claim 9, wherein the cut-off control signal and the release control signal are generated in the microcomputer by the updating system.

11. An electronic device, comprising:
a microcomputer with updateable firmware and configured to detect a firmware update state, and to block electronic device shutdown requests during the update state.

12. An electronic device, comprising:
a microcomputer with updateable firmware;
a power switching part generating an on/off power control signal controlling power supply to the electronic device; and
an updating system blocking the on/off power control signal during updating the microcomputer firmware.

13. The electronic device of claim 12, further comprising:
a signal cut-off part cutting off the on/off power control signal and wherein the updating system controls the microcomputer to output a control signal to the signal cut-off part to cut off the on/off power control signal during the microcomputer firmware updating.

14. The electronic device of claim 13, wherein the signal cut-off part is a tri-state buffer gate becoming an open circuit blocking transmission of the on/off power control signal to the microcomputer, according to the control signal from the microcomputer, and having a high state and a low state according to the on/off power control signal to the microcomputer to control power supply to the electronic device.

15. A microcomputer with an updateable firmware, comprising:
a blocker cutting off transmission of a power off signal to the microcomputer during updating of the firmware.